BANGOUR VILLAGE ASYLUM.

By Hippolyte J. Blanc, R.S.A. [*F.*]

Read before the Royal Institute of British Architects, Monday, 16th March 1908.

In venturing to invite your attention this evening, I am conscious that what I have to bring before you is not altogether new. I trust, however, it may be found acceptable as a contribution of a recently completed asylum example to the efforts of the medical faculty and of our own profession towards making more comfortable the condition of those unfortunately afflicted with mental disease. Happily for sufferers, the disease in the present day has no longer the stigma attached to it, arising from ignorance and superstition, of former times. It is only a few decades since, that those afflicted were treated with inhuman disregard, locked up and chained in miserable apartments, with worse sanitary conditions than were then provided for the greatest criminals. Those conditions have given place to a greater measure of freedom, to careful nursing under the most perfect sanitary arrangements, and to the selection of situations for buildings having cheerful surroundings, all as the result of increasing knowledge and study. Many cures have thereby been effected, and a healthful appearance is evident among the industrial patients in all modern institutions. Moreover, under classification in recent years, the separation of those of more sensitive temperament from the restless and noisy, has greatly assisted other curative measures adopted. Statistics, notwithstanding, show a continuing increase in the number of those under treatment. This may be accounted for, however, by the recent more stringent operation of the lunacy laws, by which many who would formerly have been left outside are now being drawn into asylums. Many a harmless village "natural," who was allowed absolute freedom, has now been compelled to come into the district asylum, thereby swelling the numbers in the annual returns. The death-rate in asylums has also been much reduced. A probable normal percentage of patients to population will possibly be arrived at in course of years, as the study of cases in their earlier stages of disease enables the medical faculty to combat its development.

With the many differences of temperament among insane patients, the necessity became clamant to classify them when brought together in one institution. These classifications are very various, but only two leading divisions have for the most part been adopted: one, based upon the prevailing mental symptoms; the other, the ætiological, upon the probable causation of the disease. The first classification was initiated by Pinel of France, who very early in his practice removed the restraint of chains and manacles from the patients; the second was first practised by Dr. Skae, of Edinburgh, about 1840.

Of the two main divisions of treatment in vogue now, the first aims at restoring all the organs and functions to right use by healthy occupation and by proper nourishment; the second consists in careful observation and control, companionship and distraction of the mind

from morbid thoughts by suitable occupation and amusement; also guarding against the dangers of suicide and homicide. In this will be recognised a great advance of humane treatment as against the former cruelty of stripes and tortures. During the first half of the nineteenth century, in France and England simultaneously, the practice began of applying special skill and science for the treatment of the insane. Strait-jackets were abolished and non-restraint adopted.

The next advance was the adoption of the Belgian system to be seen at Gheel, where the insane are boarded out under supervision among private households. This practice is undoubtedly the precursor of the village system of to-day. The boarding-out system for harmless patients has long existed in Scotland, and is still extensively adopted.

In a very exhaustive and instructive Paper by Mr. G. T. Hine, read before this Institute in 1901,* the author dealt historically with the best known examples of hospitals for the treatment of the insane, and dealt specially with the planning of modern asylums in both England and Scotland, noting that they are administered under different laws. The examples illustrated were chiefly of the corridor and pavilion type, and showed the chief differences in plans adopted in each country. Reference was also made to examples of the village principle as adopted in Germany, and specially to the asylum at Alt-Scherbitz, in Saxony, which is probably the originator of the type. Mr. Hine concisely described it, and noted that the principle is adopted in many modern American asylums.

With a closer and increasing knowledge of the nature of mental diseases, improvement in the arrangement of accommodation required has been very rapid. So much is this the case that it may safely be predicted that in the majority of future undertakings, instead of the "pavilion and corridor" type, the "segregate or village" arrangement will be preferred. It will be found primarily more economical to construct, and secondarily more advantageous both for patients and for those who have to administrate. The most important advantage, however, will be found in the greater facilities afforded for classification; and, if anticipated in the selection of a site, the facilities for increasing the accommodation for patients is limited only by the ability of the administrative department to supply accommodation to meet the increase. Such additions can be made without having to dislocate any of the pre-existing buildings.

With regard to our special subject—namely, Bangour Village Asylum—I have to explain that when, under the new order of the Commissioners in Lunacy for Scotland, in 1898, the Edinburgh Parish Council resolved to form a lunacy district for Edinburgh and erect an asylum, they became exercised upon the question of the form the asylum should take. The late Sir John Sibbald, one of the Commissioners, founding his idea on the German system as at Alt-Scherbitz, strongly advocated it in a pamphlet circulated among the Edinburgh Board. The result was the adoption of that type of arrangement, and "instructions" were issued to competing architects framed on the principle of segregation as illustrated in that institution.

The estate acquired is about fifteen miles from Edinburgh and twenty-nine from Glasgow by rail on the same line. It extends to 950 acres, the site occupied by the asylum being about 150 acres. It lies on the north of the public road between Edinburgh and Glasgow. From this road the asylum ground slopes northwards, rising about 100 feet in 2,500 feet, an average of 1 in 25 feet. At the north boundary it is about 600 feet above sea-level. The site presents no features of special interest, excepting a diminutive stream which modestly wends its way in a quasi-tortuous fashion near its southern boundary. The length of frontage to the main road or south boundary is about 1,300 yards. The site is historically interesting as having been the property of one of Scotland's well-known minor poets, William Hamilton of Bangour, in the eighteenth century (1704–1754). Since his time the estate has been farmed as partly arable and partly grazing land. The original mansion-house has long since passed away, but on

* "Asylums and Asylum Planning," by George T. Hine [*F.*] JOURNAL R.I.B.A., 23rd February 1901].

another part of the estate a farmhouse and relative offices were erected about eighty years ago, and these form the nucleus of the chronic or industrial section of the present asylum.

In laying out the scheme, the plan submitted was agreed to, namely, to dispose the buildings in two main groups, one, the "Medical or Observation," to occupy the eastern portion of the site; and the other, the "Chronic or Industrial," to occupy the western.

Access is obtained by a road formed from the public highway, nearly midway between the two groups of buildings. The approach is without gates, enclosures, or lodges. The nearest building, which is well within the estate, is the steward's house, beyond which are the power-station and workshops, the bakery, stores, and kitchen, also the wash-house and laundry, these being grouped comparatively close to each other, and within 150 yards of the boiler-house, from which steam is supplied to them. An improvement in this disposition could be effected on a more uniform site by combining the whole of these buildings in one connected group.

ELEVATION.

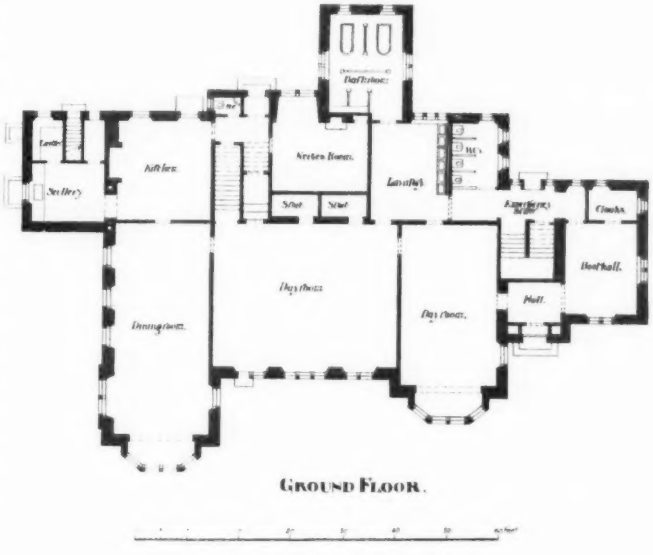

FIG. 1.—OBSERVATION BLOCK: PLAN.

To the right of these on the site are the buildings composing the medical section, and to the left those of the industrial. Of the former there are already erected in a central position the administrative house, to which are attached admission house for male and female patients—forty of each sex—these being the only buildings erected with corridor connection. Round about these are disposed four of the intended eight "closed villas" for both sexes, nurses' home, and hospital. At the extreme east boundary is placed the mortuary, and purposely on low ground to avoid being conspicuous to the patients.

The chronic or industrial section on the western area is subdivided into two groups—one for female and the other for male patients—each having its routes of intercommunication, but, as groups, placed widely apart. This western area has erected upon it at present five houses for male and four for female patients, with an ample space for additional homes when required. In all asylum buildings it has been found necessary to provide more accommodation

for female than for male patients. It is not so in this instance, at present, owing to unavoidable special requirements at the beginning of building operations. This will adjust itself in time. In the western area a site is retained for a small isolation hospital yet to be built. At the extreme north-west of the site lie the farmhouse and offices.

A greenhouse and very ample kitchen garden—indispensable appendages—find a most suitable site on an extensive slope south of the farm offices.

From these general notes an idea may be formed of the present extent and disposition of the buildings. No boundary walls enclose any of the houses, nor are there fenced areas with their associate garden walks and shrubberies to maintain, all roads and walks being open as in an ordinary village. There is throughout an absence of official institution character, and instead, the appearance is that of an ordinary city suburb.

ELEVATION.

GROUND FLOOR.

FIG. 2.—ACUTE BLOCK: PLAN.
[See First Floor Plan, p. 322.]

While the purchase price of the 950 acres of land was exceedingly moderate — £14 per acre — its isolated situation entailed special costs to render it serviceable for the purposes of its acquisition. A branch railway had to be constructed to facilitate the conveyance of building material. A water supply also had to be introduced from a source about two miles to the west of the site, with relative reservoir, filter beds, sluices, and water-keeper's residence. The water conduit was laid up to the farm buildings, from whence it is now distributed over the whole site.

Having regard to the fact that no system of drainage existed nearer than about two and a half miles, recourse was had to the adoption of the excellent modern septic system, the purified effluent from which is finally carried away by the stream already referred to. All surface water from roofs and roads is conveyed in separate pipes, and collected to form a pond in a natural existing basin near the centre of the site.

The septic tank and filter beds are about 178 feet by 128 feet over all, large enough to provide for the treatment of an average of sixty gallons of fluid per day per patient, which for the intended number of 1,000 patients is equal to 60,000 gallons capacity. But as forty gallons per day per person is recognised as a very ample provision it will be seen that the tanks are more

than ample for the requirements. The installation is of the very latest approved construction, in respect that instead of what is usual in such, namely, single contact of the sewage over a cinder bed, a double-contact bed and filtration at a lower level have been provided in this case. The resultant effluent is thus rendered perfectly clear and innocuous.

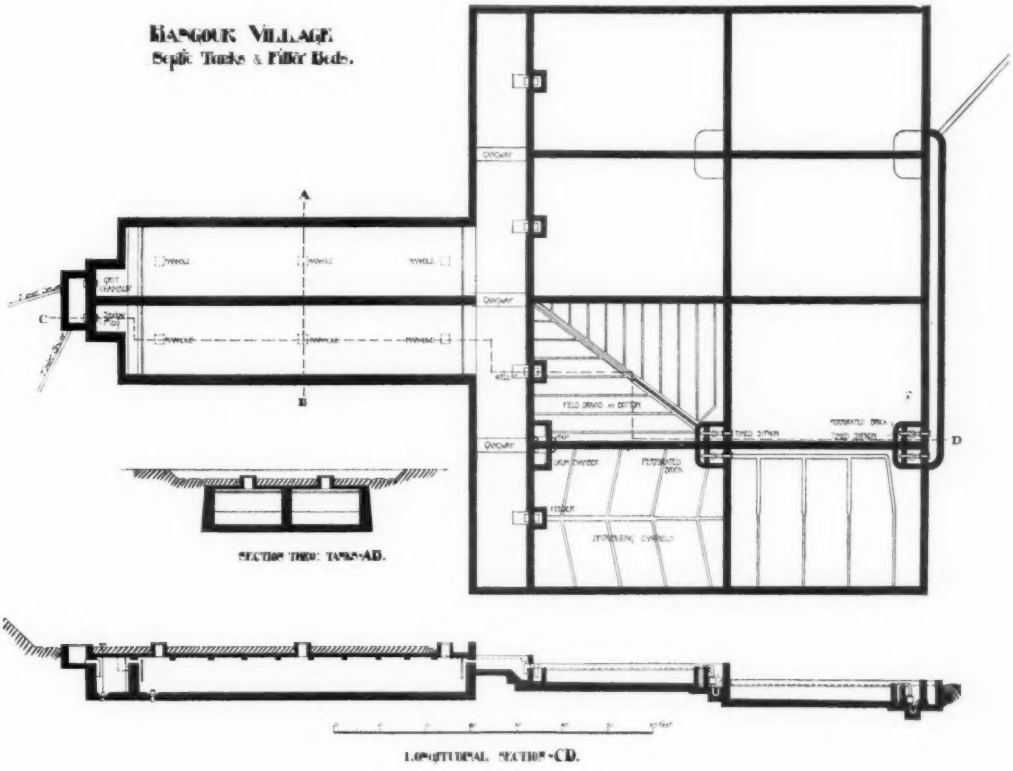

FIG. 3.

The subject of heating formed a very important consideration in this segregate arrangement of asylum, but after careful study it was decided to treat each house as a separate self-contained subject, each with its own furnaces for hot-water circulation and for atmospheric heating respectively. The atmospheric heating can thus be regulated according to the respective needs of each house.

Each home is provided with electrical appliances for ventilation by fans, wherever special ventilation is considered essential, such as in the boot-rooms and lavatories. For all dayrooms and dormitories ventilation is provided by the windows. Electric current is generated on the estate. There are three boilers (with space for a fourth), each capable of evaporating 7,500 lb. of water per hour, and working up to a pressure of 130 lb. Two of the boilers are sufficient to meet the present requirements for dynamos, for the electric-lighting supply and motor power, also for the supply of steam for cooking and heating of a limited number of buildings. Accumulators charged during the day are provided for night requirements.

Communication between the different homes is provided for by an installation of the telephone, the centre or exchange for which is at the administrative house; and for

uniformity in regulation of time the various clocks throughout the institution are synchronized by a system of communicating electric wires connected to a main regulating and controlling clock at the administrative house.

Before giving detailed explanation as the slides appear on the screen, the following general notes may be found useful.

First, as regards the homes, the accommodation generally consists of :—Day-rooms, dining-room with kitchen and servery adjoining, scullery and storerooms, lavatory, w.c.'s, boot-room and cloak-room, also nurses' dining-room, all on the ground floor. On the first floor : dormitories, nurses' rooms, one w.c., housemaids' pantry, and bathroom. A third floor occurs in one or two of the homes where additional dormitory accommodation is required. Each home has its own kitchen and scullery for dealing with any special diet ; all kitchen utensils used in the homes are cleaned there. Each home is provided with two staircases, in simultaneous use, to accustom patients for cases of emergency.

Water-closets are fitted in series according to the number required in the respective homes. The model adopted is the white glazed pedestal wash-down. The silent flush cistern is of white enamelled iron, all corners being rounded and the cover sloped back, on all sides. No chain nor connecting rod is visible, the flush being produced by a gentle pressure of the finger upon a pin concealed within a slotted tube attached to the wall. There are no knobs or projections of any kind to which patients of suicidal tendency can attach a hold. The divisions are of Sicilian marble 1¼ inch thick, recessed into the wall, projected 4 feet 6 inches, and supported at about twenty inches from the floor on gun-metal brackets. The total height from the floor is about four feet six inches. Floors are laid with terrazzo rounded at the angles of the floor and walls, which are tiled. No urinals are introduced in any of the homes. Cross-ventilation is provided by windows. The water-closet wing is in height a single story only, no occupied buildings being built over it. Each, in addition to cross-windows, has an extract shaft carried up in the main gable, with electric fan, for ventilation.

The lavatory apartment is, in each home, arranged adjoining that for the water-closets. The basins are separate white glazed earthenware projected from the wall on brackets. There are no traps in the pipes, which spill directly into a continuous open gutter formed in the terrazzo floor.

There is no general bathhouse. A special detached building was at one time proposed, but abandoned owing to the risk to patients, under unfavourable weather conditions in an uncertain climate, passing between their homes and the bathhouse. Each home consequently has its own bathroom containing one, two, or three baths, according to the number resident, separated by low screens, and with semi-enclosed dressing boxes. The baths are of special make from purpose-made drawings. They are lower than usual, the top, to afford a rest for the patient while being dried, having a 5-inch broad flat instead of the usual heavy roll. The cope is also rounded with a shallow cavetto on the under side to prevent the patient securing a hold.

As already noted, the homes are each furnished with two boilers, the segregate arrangement whereby the homes are distributed over the site making the supply of steam from the boiler-house wasteful and expensive. All furnace chambers are sunk, and enter from the outside in order that any inconvenience from smoke may not affect the comfort of the patients in the home, as would certainly arise were the chamber in direct communication with the interior.

A matter of importance under the Commission of Lunacy Laws is the control for opening windows, which must not be raised beyond five inches. Having regard to this, the following patent has been adopted. Instead of the ordinary ropes and weights, lifters and

fasteners, a toothed wheel with double ratchet is attached to the upper and lower sashes. The sashes are constructed with divisional astragals, which enable the lower sash to be raised by hand. The raising of the lower sash actuates the toothed wheels on the styles at each side of the windows, causing, by reverse simultaneous action, the upper sash to descend. The advantage is that no mechanism whatever is visible for patients to tamper with, the sashes being equally balanced: neither ropes, weights, nor counter-check fasteners, nor rods for lowering the top sashes, are required. Moreover, by the equal opening of both sashes, a natural circulation of air is obtained. For wards wherein are bedridden patients, who might be inconvenienced by the passage of air so near where they lie, baffle-boards are placed on the sill, fastened between the batten rods. The entering air current is thereby diffused. The cost of hanging a double sash in the usual way is 13*s*. 10*d*., while the cost of the patent, which meets all the requirements more simply and effectually, is 12*s*. 6*d*.

To simplify reading the plans, it is proposed to start the series at the power station and take up those in the west or industrial section, returning on the north and terminating with those on the east or medical section.

POWER-STATION AND WORKSHOPS.

These are grouped in one oblong block, 220 feet long by 140 feet wide. It adjoins the railway siding, from which coal is delivered direct from the trucks through shoots into a large coal store of 200 tons capacity, in front of the boilers. Attached to the latter is an installation of Green's Patent Economisers. The chimney, 125 feet in height, rises from a small courtyard outside the boiler-house. Behind the boiler-house are the dynamo hall, the accumulator room, and the engineer fitter's shop, and alongside is a large quadrangle (105 feet by 95 feet), on two sides of which are the workshops for the painter, smith, cabinetmaker,

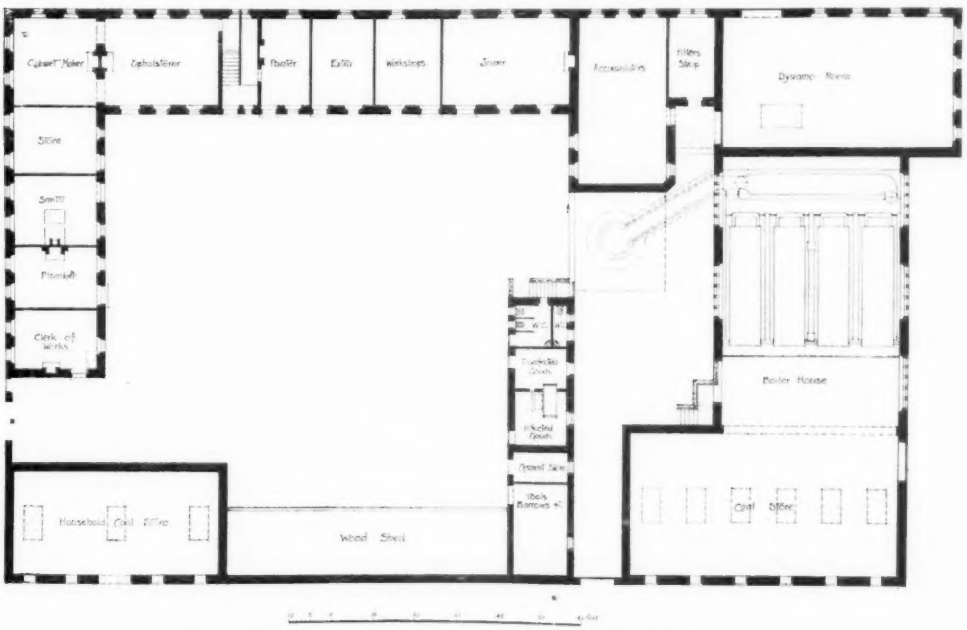

FIG. 1.—BANGOUR VILLAGE ASYLUM: PLAN OF WORKSHOPS, ENGINE, AND BOILER-HOUSE.

upholsterer, carpenter, shoemaker, plumber; also clothes store, cement store, clerk of works' office, &c.; while, on the other two sides, accommodation is provided for the storage of 100 tons of household coal, a shed for implements and wood, and a large chamber for disinfecting clothing by steam. The engineer's residence is near by.

THE BAKERY.

The bakery is a small building, measuring externally 65 feet by 31 feet. There are two ovens, one, the ordinary "Scotch oven," capable of baking 300 two-lb. loaves at a time. The other is a "draw-plate" oven, which is capable of baking 256 two-lb. loaves, and can deal with three batches per day, fired with coke. The machinery for dough-mixing and other requirements is actuated by electric motor. There is a part upper floor of L form on plan for the storage of flour, which is passed down in shoots to the machines below. The gallery floor is of cement. The area of it will accommodate 200 bags, or 400 if a double layer is laid on, as is intended. The accommodation is complete with coke-store, bread-cooling room, &c.

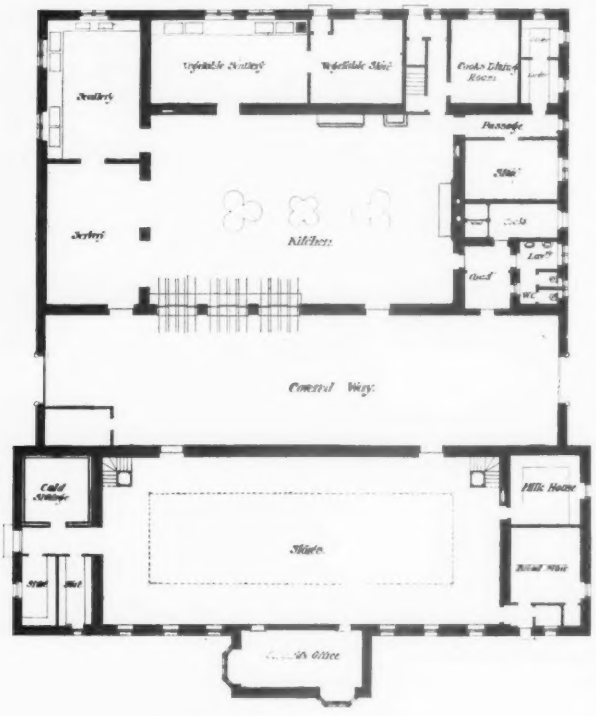

FIG. 5.—BANBURY VILLAGE ASYLUM: PLAN OF KITCHEN AND STORES.

KITCHEN AND STORES.

The store and kitchen are together in one block, about 131 feet by 114 feet, but are separated by a covered arcade, 28 feet wide, for accommodating vans delivering goods, and also for those conveying food from the kitchen to the patients' residences. The store is a large apartment, 85 feet by 36 feet, for the reception and general classification of goods, with a gallery all round for soft goods. A boot-store is in a large annexe entering off the gallery. Goods are raised by means of an elevator. At one end of the store is a specially constructed cold store, with motor and brine pump-chamber adjoining, for the preservation of food in hot weather.

The kitchen is a lofty hall, 65 feet by 40 feet, with all necessary coppers, steam-chests, &c.

A special feature in the kitchen is a large range of hot presses, divided into a series of compartments, specially heated by batteries of pipes. For each compartment there is a travelling wagon on rails. It is rolled out on the kitchen floor, and upon a series of shelves within it jacketed tins containing the food for the several residences are placed. The wagon is then replaced in the hot press, to be withdrawn on the arcade side, the food-tins

withdrawn and placed in a van for distribution. The whole food can be distributed over the various houses in about twenty minutes without sensible diminution of heat.

The vegetable and washing sculleries and other relative accommodation form part of the kitchen block. The cook and workers in this department also have their rooms in an upper floor of the kitchen building.

WASHHOUSE AND LAUNDRY.

The washhouse and laundry block measures 102 feet by 80 feet outside. In the washhouse are washing machines and hydro extractors, and, as a means of giving occupation to the patients, there are a few ranges of hand washing tubs. A supplementary annexe, of lesser area, with machinery for special washing, is attached. The receiving-room for soiled linen is at one end of the washhouse. It is fitted with a series of bins for the classification of goods.

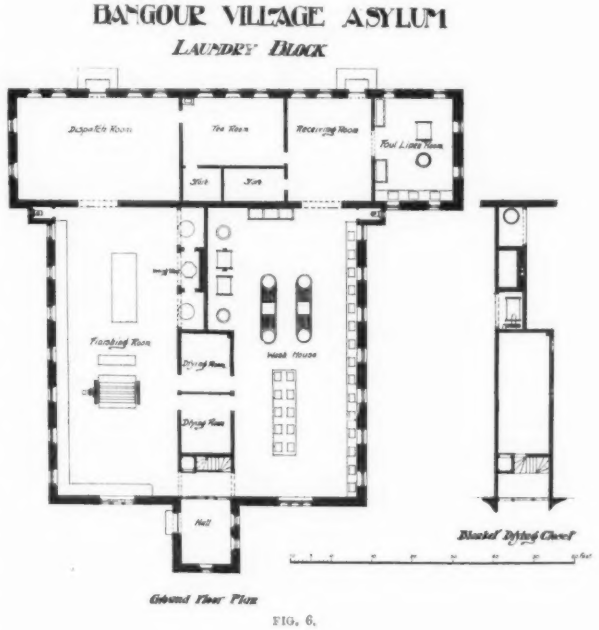

FIG. 6.

The laundry, which, like the washing-house, is 71 feet by 30 feet, abuts on the washhouse in parallel axis, between them being two drying closets. These closets are filled from the washing-house side, and the clothes withdrawn, after being dried, on the laundry side. Hot air from a battery of steam pipes is driven through these closets by a large fan so controlled as to admit of filling or emptying under cool conditions each closet. Machinery is largely employed for ironing and dressing, but, in addition, there are special tables fitted for hand-dressing. When finished all goods are passed to the delivery-room at one end of the laundry for distribution by van. The dispatch door adjoins that for receiving, the goods in the course of clearing having thus to pass round from one door to the other by first the washing-house and next the laundry. An afternoon tea-room is provided in the laundry for the use of patients.

FEMALE INDUSTRIAL COLONY.

The female industrial colony is to the west of the laundry. It comprises four homes, affording accommodation for 190 patients. For convenience, the laundress' home for forty-six patients is nearest the laundry, the other three being placed at about fifty-yard intervals. The patients in these are employed on dressmaking and other needlework.

FARMSTEADING.

The farm at the north-western corner of the site is created from a few pre-existing buildings. A well-lighted and ventilated byre, about 132 feet by 33 feet 6 inches, with stalls

for sixty-four cows in pairs, is on the south of the series. Accommodation for dairy requirements, boiler-house, and food-stores occupy a parallel range of building on the other side of a separating corridor and have a north aspect. All liquid manure from the byres is by a special contrivance separated and conveyed to a large covered tank in the kitchen garden adjoining, to be distributed when required.

The buildings also comprise: a young cattle shed and calf-house, also a range of twelve pens for fattening pigs, stables and coachhouse, van sheds, and boiler-house for preparing food. A special piggery for breeding stock and a slaughter house are on the west side attached to part of the original group of buildings. In the piggery there are twenty large pens formed with cement divisions, also a covered courtyard. The floors are of cement and the walls faced

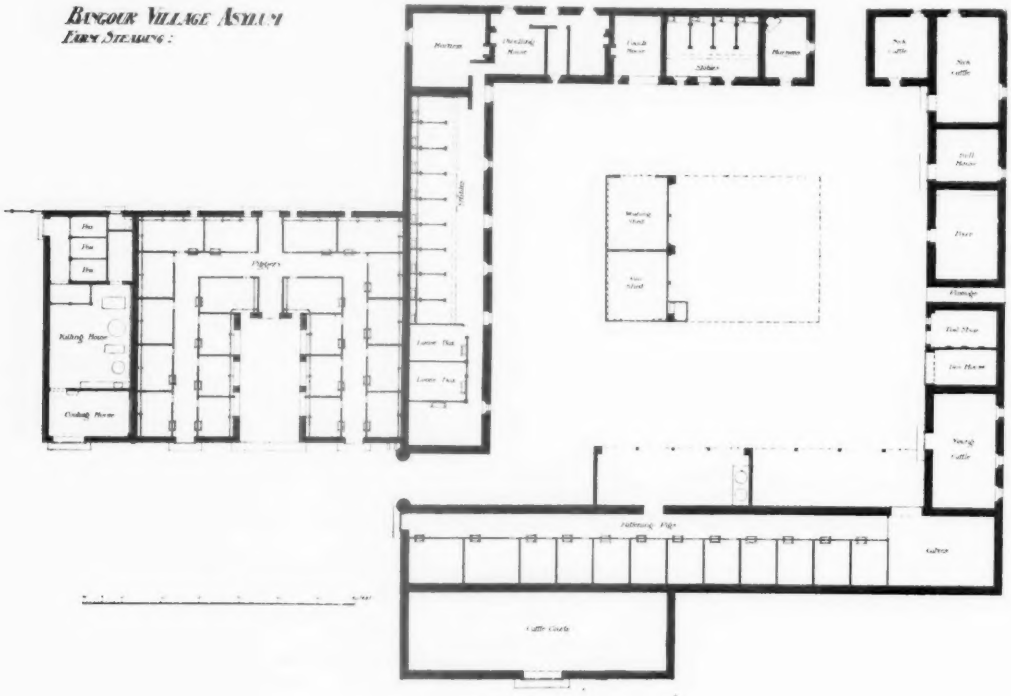

FIG. 7.

with cement plaster, thus enabling the whole to be readily flushed out by hose. The cattle entrance to the slaughter-house is at one end of the building. The gates of the enclosure are so hung as to prevent cattle moving from the pens there except in one direction. From the pens the cattle are led to the killing-house, in which are special appliances for carrying out the several operations required. The carcase is then wheeled along to the cooling chamber, from which it is removed by van to the meat-store.

Farm workers' cottages and a grieve's house are erected on a site conveniently near the farm buildings. The accommodation in each consists of two rooms, kitchen, scullery, and w.c. The grieve's house has an extra room.

The farm workers are accommodated in the original farmhouse, readapted for twelve patients.

FIG. 11.—BANGOUR VILLAGE ASYLUM: NURSES' HOME: ELEVATION.

MALE INDUSTRIAL COLONY.

The homes for the male industrial patients are on the north side of the west section of the site. There are five, accommodating in all nearly 250 patients. Owing to urgency by the authorities these are constructed of wood framing, with corrugated iron on the roofs and on the outer wall faces. The walls are packed with asbestos and all internal surfaces plastered. Their cost to construct and maintain is, however, not in favour of their being preferred to stone buildings.

MEDICAL SUPERINTENDENT'S RESIDENCE.

The medical superintendent's residence [fig. 8, *folding plate*] is situated upon the higher ground on the estate (about 600 feet above sea level) near the north boundary, well removed from the asylum, but in telephonic communication with all parts. The site is that once occupied by the historic "Bangour House," several parts of the foundations of which were revealed when excavating for the present house. The accommodation is normal, economically grouped, and the finishings appropriate.

NURSES' HOME.

The nurses' home is a detached block of H form on plan [fig. 9, *folding plate*, and fig. 11], and is of three floors and attics, subdivided into a series of bedrooms to accommodate eighty-seven nurses, the ground floor being specially arranged for nurses' dining-room, sitting-room, writing-room, matron's rooms, and other general accommodation. About one-fourth of the nurses are on night duty; the remainder during the day. To obviate inconvenience from noise of traffic the day nurses have the first floor appropriated to them, the night nurses having the upper floors. The nurses for whom this home is provided attend only in the "medical" section, all those, together with attendants for the industrial section, having their rooms provided in that section.

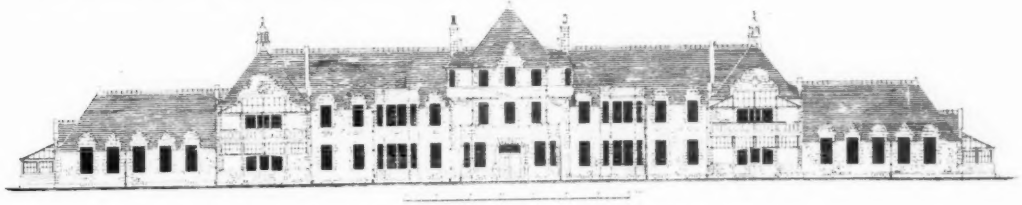

FIG. 12.—BANGOUR VILLAGE ASYLUM: ELEVATION OF HOSPITAL BLOCK.

As in all the homes, there is a kitchen provided for preparation of special diets when required. The provision of a separate home wherein nurses can be entirely separated from their trying duties has frequently been advocated, and is welcomed as an important improvement in this asylum equipment.

HOSPITAL.

At a distance of about 120 yards from the nurses' home is the hospital for the sick and infirm of both sexes [fig. 10, *folding plate*, and fig. 12]. It consists of a series of wards on a ground and first floor, two being 48 feet by 25 feet, to accommodate twelve beds each, and four being 62 feet by 25 feet, accommodating fourteen beds each. These with a few side rooms yield accommodation for ninety patients, each patient being allowed an area of 100 to 110 superficial feet, as against 60 superficial feet for each patient in the dormitories of the industrial homes.

A specially constructed covered and protected verandah for open-air treatment is provided at one end of each ward.

The accommodation further provides kitchen, scullery and kitchen offices, maids' rooms, &c., matron's rooms, large lecture-room, surgery, &c. A hoist for lifting patients to the first floor is provided near the centre of the building. It is large enough to contain a bed, so as to save, as much as possible, inconvenience to the patient.

MORTUARY.

The mortuary is a parallelogram, about 50 feet by 33 feet. The accommodation comprises a mortuary chamber for nine bodies, a post-mortem room with table and other relative fittings, photographic room, pathological and research room, and also a room for funeral services. The mortuary slabs are specially constructed of enamelled fireclay, basined and laid to a gentle slope about four feet from the floor. By a simple contrivance the space underneath them is appropriated as a coffin chamber, access to which is obtained from the outside.

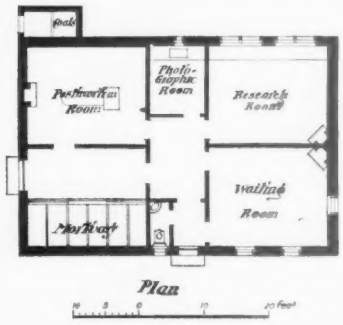

FIG. 14.—MORTUARY BLOCK.

CLOSED VILLAS.

Of the four closed villas two accommodate forty, and two thirty-two, patients each; the apartments, in number and arrangement, resemble those provided for the industrial homes. The general dimensions are also similar, but a number of single rooms have specially to be provided in both the observation and the acute villas. One "acute" villa is provided each for male and female patients, and in it there is one padded room—the only two in the asylum. This and the single room practically constitute the only difference between the medical and the industrial section of the homes. All the single rooms have double doors. Moreover, the partitions dividing the dormitories of the observation villas are only about four and a half feet high, so as to afford a simultaneous open view for nurses.

ADMINISTRATIVE BLOCK.

As already stated the administrative block [fig. 13, *folding plate*, and fig. 15] occupies a situation intended to be central in the medical division of the institution. It comprises a large centre block containing the administrative offices of the medical superintendent, assistant medical officers and matron, clerks' room and Board room, as well as residential

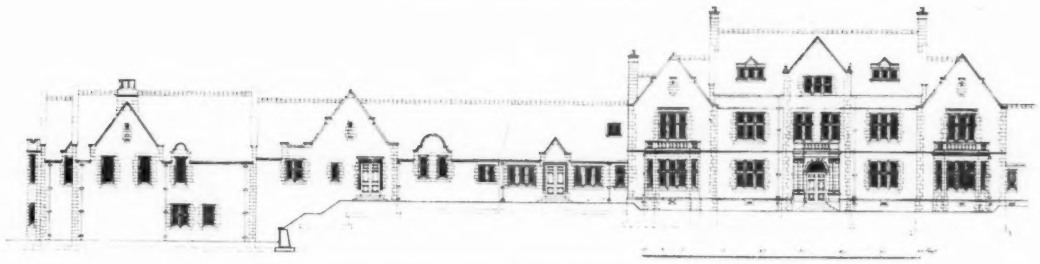

FIG. 15.—BANGOUR VILLAGE ASYLUM: ADMINISTRATIVE BUILDING: CENTRE BLOCK AND WEST WING.

accommodation for the assistant doctors on the upper floor. Connected by a wide corridor at each end are the admission wards for male and female patients, each accommodating forty patients. For preliminary observation and record the doctor's room with photographic studio, bathroom, and one or two single rooms are grouped round a vestibule at the visitors' entrance on each side. They are partitioned off from the occupied wards, so that nothing tending to depress may be observed by anyone coming for first treatment. Only as the nature of the particular case reveals itself is it decided in what section of the institution the patient shall be placed.

Each admission ward has its own kitchen for sick-room cooking.

RECREATION HALL.

The recreation hall is situated, as it should be, nearly midway between the "medical" and the "industrial" section of the asylum. It provides a large hall, 93 feet by 54 feet, with boot and cloak room at the male and female patients' entrance at the south end of the building. At the opposite end is a large and fully equipped stage, complete with retiring and dressing rooms. Doors of egress of liberal width are provided near the four corners of the building, and two additional at the patients' entrances—making six in all. By means of lattice steel girders to support the roof, pillars are dispensed with, thereby throwing open the entire floor area for social functions. The hall will accommodate 700 persons, with 7 superficial feet to each. For theatre performances the orchestra is provided for in a roomy sunk pit in front of the footlights. This pit is, by special construction, covered over at the floor level on dance occasions.

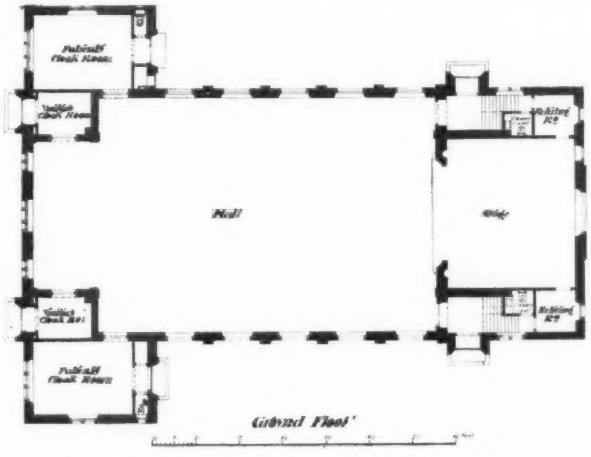

FIG. 16.—BANGOUR VILLAGE ASYLUM: PLAN OF RECREATION HALL.

GENERAL OBSERVATIONS.

The village may be said to be self-contained, having, as noted, its own specially constructed water supply and reservoir, a complete and independent system of drainage in duplicate, the surface water being delivered into a natural pond, and the soil water conveyed separately to septic

tanks, whose purified effluent enters the stream at the east end of the estate. Fire hydrants are distributed over the grounds. Two fire sheds for hose and other appliances are placed at the extremes of the estate, and each house is provided with hydrants and fire-extinguishing apparatus outside, as well as inside the separate buildings.

The village, by the industry of the patients who are able, stocks its own larder as far as possible, and provides its own kitchen supplies and dairy produce.

Having regard to the needs of continual supplies of coal and stores a private railway has been constructed for this and passenger traffic, and has been found a great convenience.

I have already stated my belief that asylums on the "segregate" principle are more economical to build than are those on the "pavilion and corridor" principle. For the latter enclosing walls are in most instances required, and these are costly. In addition to roads, mileage of tunnels, heating pipes, and extra boiler power are required, and these are expensive items which are much modified by adopting the village system. The after maintenance also is much more simple and economical, all parts being more easily accessible for repairs. The supervision is easier, as there are no ramifications of long corridors, but all patients can be quickly accounted for among the small groups composing each home.

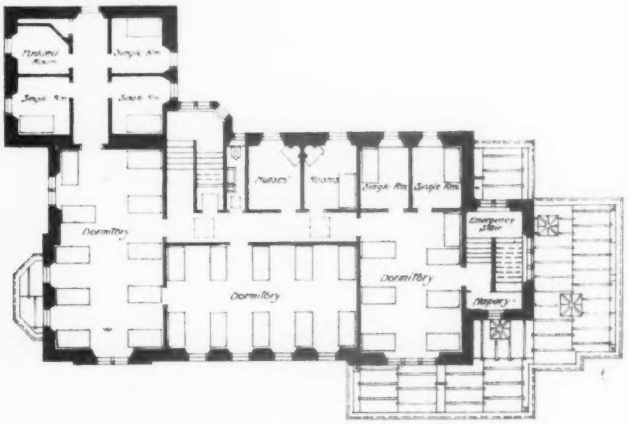

FIG. 17.—ACUTE BLOCK: PLAN OF FIRST FLOOR. *See Ground Floor Plan, p. 312.*

For the patients the characteristic home-like appearance of the house must be less depressing than are the more or less formidable large pavilion buildings. Risks of fire are minimised, and if occurring can be more easily dealt with, and its area limited. There are a few possible disadvantages which cannot be overlooked in an "open door" arrangement of asylum: one, the risk of patients escaping; the other, the possible extra staff of nurses required for supervision. Both of these points, however, may be disposed of together; because, with its risks, the freedom allowed is part of the cure: so also is the slight possible addition (about, say, 6 per cent.) to the staff over the usual proportion in a pavilion-constructed institution.

The experiences, as related in the annual reports, from American asylums may be summed up in a passage in which it is stated: "the advantages of the cottage system and the non-restraint treatment of the insane show the cost of plant to be one third of the one building, the pavilion type of plan, and the expenses of maintaining the institution are materially less. The policy of allowing patients the largest amount of liberty consistent with their respective conditions has been continued, and no accident or incident of an unfortunate character has occurred."

With regard to the nurses and attendants, the former are the larger proportion. In the acute villas, there are eight patients to one nurse; in the hospital, eight; and in the indus-

trial homes, twelve. For the farm workers, the male industrial, and male acute patients, there are male attendants, a few of whom have sleeping rooms in the houses, while others live in cottages just outside the estate.

All the permanent buildings on the estate are constructed of freestone, from various quarries in Scotland. Roofs are mostly slated, a few being covered with red tiles, with the aim of giving as much variety as possible. The buildings are not laid down with any regularity, and, both in design and material, variety is imparted to them.

In stating the cost of asylum buildings there are so many factors to be allowed for that to make comparison from general figures is misleading. Some sites possess water, either from gravitation or from artesian wells, as at Crichton, Dumfries, and Kingseat; others have a stone quarry, as at Kingseat, Aberdeen. Again, there are those where the contour of the ground necessitates considerable underbuilding to "level up" the buildings, such as at Bangour; and all these matters, with many more, have first to be discounted.

The following is approximately the cost of a few recently erected asylums in Scotland:—

District	Asylum	Patients	Rate per bed	When executed
Lanark	Hartwood	950	£247	1895
Glasgow	Gartlock	613	407	1896
Govan	Hawkhead	510	356	1895
Aberdeen	Kingseat	482	255	1905

These show a rate per patient of from £247 to £407 for asylums of the pavilion type, as against one at Kingseat, Aberdeen (one of the village type), at £255.

Though the works are not entirely finished at Bangour, they are all but finished, and the accounts are lodged. From these a very close approximate total is brought out at £237,000 for the 750 patients at present in the Institution; so that for buildings, roads, drains, septic tanks (a special work), water, fencing and planting, machinery and electric lighting, fees (also four clerks of works' wages), &c., &c., comprised in the above total, the rate works out at £316 per bed. But as the administrative buildings are provided for the intended full number of 1,000 patients (the extra homes for whom will add £30,000), the rate for the 1,000 patients will be reduced in proportion, and will stand at £267 per bed. This is £33 per bed less than was anticipated and allowed by the District Lunacy Board, or a total saving on buildings, &c., of £33,000. This does not include reservoir, railway, furniture, and site, which have not been dealt with by the architect. The furniture, it may be noted, has cost about £14 per patient.

Did your patience and time permit, there are many interesting illustrations not shown upon which a word could be said. A few points in them are common to all asylums, while many, in addition to those already referred to, are special to Bangour. For the number accommodated, and having regard to the area covered, Bangour has so far been found an easily worked institution, and as a site, on an open southern slope, is healthful. It is also found convenient for intercommunication with the city.

If the number of certified insane is increasing, as statistics declare it is, it becomes incumbent upon all interested to assist the means being employed for improvement of the conditions of the patient. In the arrangement of an asylum many problems arise, and these call for the exercise of much patience, thought, and skill towards their solution. The requirements of each district vary; so the buildings and grouping of them require to be specially adapted. The classification of patients is increasing the number of subdivisions, which will eventually claim extra consideration from the medical superintendent and the architect. Each new asylum is an independent study; therefore the architect's first and chief duty is, as Mr. Hine advised, to consult the medical superintendent of the institution and find out the

special requirements, identify himself in sympathy with these, then apply himself to the details of the work according as his skill and experience dictate.

In dealing with the needs of Bangour I own my deepest obligations to the Medical Superintendent (Dr. John Keay), whose great experience, skill, and advice, at all times most generously given, have greatly conduced to the success which, it is allowed, the institution expresses.

DISCUSSION OF THE FOREGOING PAPER.

The President, Mr. Thomas E. Collcutt, in the Chair.

Mr. GEORGE T. HINE [*F.*] said he had great pleasure in proposing a vote of thanks to Mr. Blanc for his very interesting Paper. He did so more particularly because he, unfortunately, was called in at one time with the object of marring the beauty of Mr. Blanc's design. Four or five years ago, when the great wave of economy first set in in the country among public bodies, it became bruited abroad in Edinburgh that Mr. Blanc was proposing to spend money on the wreckage of population which might be expended with better advantage on the useful and working classes. He was consulted as to how Mr. Blanc's design could—he could put it in no other word—be "marred." He would not tell them what occurred, but the result of the investigation was that Mr. Blanc was restricted to an expenditure of £300 a bed; and he (Mr. Hine) was very pleased to be able to congratulate him on having not only kept down to that expenditure, but very much below it, and at the same time, looking at his drawings, it would be admitted that the beauty of the designs had not been marred for a building of that class. When they considered that there were in this country alone a total of something over 100,000 lunatics, increasing at the rate of 2,500 to 3,000 a year, all of whom had to be provided for, and that the annual expenditure for housing them amounted at the least to from half to three quarters of a million sterling in buildings alone; and when they further considered that few of these unfortunates had any appreciation of beauty, they would at once agree that it could only be considered a gross extravagance to expend money in decorative buildings or ornamentation which in no way increased either their health or their comfort. Mr. Blanc, in designing this building on the colony system, was, if not quite the pioneer, one of the first in this country to adopt the principle. The villa system of asylums had been tried abroad. The first originating the plan was the Alt-Scherbitz Asylum, of which Mr. Blanc had shown an illustration. Since then some four or five had been erected in Germany. In England we were moving at a less rapid pace. We would not embark on an undertaking of this kind to the large extent that had been attempted at Bangour without some experience of the working of the villa system, and therefore in some of our asylums we had been trying it to a limited extent by erecting a few detached villas for the better class of patients surrounding a main asylum designed on the old principle. Whether a complete villa asylum, such as Mr. Blanc had designed, was going to be a success remained to be proved. In a climate like ours, sometimes with two or three feet of snow on the ground, it might not always be an easy matter to convey a warm dinner from the main kitchen to some of the outlying blocks. He thought that in a few years the promoters of this scheme in Edinburgh might probably think they had gone a little too far. Mr. Blanc, however, was not responsible for that; he had his instructions, and had merely carried them out; and from what he (the speaker) had seen of the site and the drawings and photographs, he had done so very successfully, and he hoped that the whole scheme would be completed as satisfactorily as it had been begun.

Mr. WM. WOODWARD [*F.*] said he had great pleasure in seconding the vote of thanks which had been proposed by Mr. Hine, one of their greatest living authorities on the subject before them. Mr. Blanc had evidently studied his subject in the minutest detail, and with the exception that he rather differed from him in not providing urinals and in advocating the use of the closet with the tip-up top, he was sure that they would all agree with Mr. Blanc. He thought that the colony system of asylum as described by Mr. Blanc must be a very admirable one. Only a fortnight ago he had gone over an orphan asylum, and in the medical department there they were practically adopting this system of subdividing the patients; instead of having them in large wards, they were taking them in single rooms; and he was certain, even from the single visit he had paid to that asylum, that there was a great advantage indeed in isolating the blocks from each other.

Mr. S. PERKINS PICK [*F.*] said that, having had recently some experience in asylum building, he was pleased to add his quota of thanks to Mr. Blanc. Before offering any criticism, he should

like to suggest that the discussion of a Paper of this sort would be much more easily dealt with if the Institute adopted the practice of the Institution of Civil Engineers, and sent the Paper round to the members who were interested in these subjects for previous consideration. Their discussions would then be of a much more intelligent and interesting nature, and the Papers as published in the JOURNAL would be of considerably greater value. With regard to the village system generally, he understood from Mr. Blanc that he was not responsible for its adoption at Bangour, and personally he (the speaker) could not see where the advantage of the system came in. It was all very well to show views of these cottages or houses, with a very nice growth of trees round the blocks, as illustrated in one of the lantern slides—but when they had got each block containing not less than thirty or forty patients, to say that the people going into those asylums were living in village asylums was a misnomer. Once admitted into a block for forty or fifty patients, they soon realised that they were in an institution. Call it what one liked, as soon as a number of people were congregated in a villa, the same institutional character came into force. With regard to the appearance from the inside, there also no special advantage was gained, because when a view was taken from the windows of one of those villas, one simply saw a great mass of other buildings in the immediate neighbourhood; in fact, a good deal more than was to be seen from the day-room windows in the ordinary pavilion type which Mr. Hine was very largely responsible for perfecting. So far as the general aggregation of buildings was concerned, rather more was to be seen from the windows of one of these villas than from those of the other buildings referred to. As regards the point of the separation of the wards, it had now become quite a usual practice to separate them by dormitories, keeping the day-rooms a considerable distance apart. With those day-rooms facing the south, each one having its own garden area—probably half an acre in each case—well planted, there did not seem to be the necessity of building these separate villas, which appeared to be one of the things some Boards were crying aloud for. Again, when one took into consideration the enormous difficulty in the administration—the number of fires that had to be provided; instead of one heating apparatus twenty heating apparatus; instead of one hot-water service twenty hot-water services; then the collection and distribution of the laundry, the stores, and the feeding arrangements, &c., &c. When all this was taken into account, it seemed to him that instead of going forward one was going backward if the village system was adopted for asylums. He could not see that there was any necessity for this village system if one had a well-planned asylum on lines which had now in the aggregate system become somewhat standardised. The Lunacy Commissioners in Scotland seemed to be a good deal easier in these matters than the Lunacy Commissioners in England; and if he might go a step further—he believed that the intelligence of the Lunacy Commissioners here was of a higher order than that of the Lunacy Commissioners in Scotland, if the plans shown them that evening were to be taken as an illustration. Particularly did he say this with reference to the arrangement of the sanitary adjuncts in the wards—in his opinion, they were not sufficiently separated from the wards; and also particularly in the lighting and ventilation of some of the day-rooms and dormitories. A dormitory such as that shown on the screen, with eight beds in it, lighted mainly from one side, was not, he thought, quite the best and most sanitary arrangement, and he could not help thinking that if such an arrangement had been presented to the Lunacy Commissioners in England, they would have required such alterations as to get them properly ventilated—that is to say, cross-ventilated in each case. In conclusion the speaker said that he supported very heartily the vote of thanks to Mr. Blanc for his interesting Paper.

MR. MATT. GARBUTT [*F.*] said that he gathered from Mr. Blanc's opening remarks that one of the chief reasons for the adoption of this village system was to remove the patients into more natural, and one might say more beautiful, surroundings. He was a little surprised to notice that Mr. Blanc did not refer directly, excepting when he mentioned flowers, to the effect of colour in the patients' surroundings upon the state of mind in mental diseases. He had always understood that colour had considerable effect. Having the notion that beauty was one of the leading arguments in favour of the village system he was particularly interested in Mr. Hine's statement that people mentally afflicted had no appreciation of beauty in any form whatever. That came as a great surprise to him. He did not know that that was the case, but probably Mr. Hine had excellent authority for saying so. If it were true, then it would appear that this village system could not possibly have any advantage to the patient that would compensate for its probable additional cost, and certainly for its difficulties of administration. The difficulties of administering a number of scattered houses must obviously be greater than managing an institution within four walls. As to matters of detail one could not help noticing one or two things in the photographs shown. He did not know if there was any special reason for having those untrapped wastes from the lavatories discharging into open troughs. In London one would get into trouble with the sanitary inspector for an arrangement of that kind. The little pigeon-holes in the mortuaries for the bodies did not appear to be very good, although he knew that they existed in a good many London mortuaries. It would seem to be very much better—and he had known it

advocated by mortuary keepers—to have the simple, plain, glazed walls, wooden trestles which could be burnt if anything happened to make them foul, and the walls of the mortuary clear of any sort of projection, so that they could be washed down with acid if necessary; because anything that came into contact with dead bodies must be offensive in the extreme and probably very dangerous. He had much pleasure in supporting the vote of thanks.

THE PRESIDENT, remarking upon the lateness of the hour, said he would merely put the vote of thanks to Mr. Blanc for his very interesting Paper.

The vote was carried by acclamation.

MR. BLANC, in reply, said he hesitated to detain the Meeting at that late hour; but he should not like to return to Scotland without relieving himself of the obligation he felt he was under to them for their patient hearing of his Paper, and for their kind expressions of appreciation. A great deal could be said for and against the village system. He granted that at present it looked a bare representation of blocks of stone. He granted, also, that if there was any appreciation by the patients of what was beautiful, the purpose of putting the beautiful before them, if those buildings could be called beautiful, or at least putting natural pictures before them, was to assist in the cure. The patients were not mere pieces of humanity with no sense of sentiment. They had had, he believed, from 30 to 40 per cent. of cures in the year, which spoke volumes for this "nature" method of treatment. As regards what had been said about the distance to travel, say, to the laundry, it must be remembered that in the pavilion system they would have quite as great distances to travel to the laundry; but at Bangour village the outside traffic was conducted within a very limited space of time, and not the slightest inconvenience had been experienced. With regard to the objection stated that with snow on the ground it was difficult for the doctors to go from building to building, the idea was that a doctor should treat the village as he would if he were a private doctor living in a village; he would then have to visit from house to house under all conditions of the weather. With regard to fires and the consumption of coal, there again they had the ordinary village arrangement. The aggregate amount of coal consumed in a year was nothing like what was required to maintain a number of huge boilers supplying steam—which probably leaked all the way. He had visited many steam-heated asylums, and he could trace out the course of the steam pipes in the ground by the little ebullitions of steam from traps as he walked over the vast areas occupied by one of the pavilion systems. The steam pipes could not be kept in a sufficiently sound condition. All this was saved in the village system; one man went the round of the villas attending to each set of furnaces summer and winter as required. When the place became clothed with verdure, and the trees had grown and had partly screened the buildings, the whole picture would be changed, and they would have a scene such as that existing, say, at Alt-Scherbitz. With regard to the mortuaries, he may have created a false impression by saying the bodies were laid out in separate enclosures in the mortuary chamber. That chamber occupied a large space, about 18 by 15 feet, and the bodies were laid out on separate basinned slabs, not in the open on timber, as might be seen in some other asylums. Each slab was of glazed fireclay, like ordinary kitchen ware; every provision was made for the removal of any fluid, and the chamber could be hosed in every part, all walls being of glazed brickwork. There was also a constant current of ventilation through it. He thought this chamber was a vast improvement on many ordinary systems.

9 CONDUIT STREET, LONDON, W., 21*st March* 1908.

CHRONICLE.

The Royal Gold Medal 1908.

The following letter, addressed to the Secretaries of the Institute, has been received from Sir Dighton Probyn :—

BUCKINGHAM PALACE : *5th March* 1908.

GENTLEMEN,—I have to acknowledge the receipt of your letter of the 4th instant, in which you announce, for the information of the King, that the Royal Institute of British Architects has awarded the Royal Gold Medal for 1908 to Monsieur Honoré Daumet.

I have had the honour to lay your letter before the King, and I am now commanded to signify to you His Majesty's approval of this award.

I am, Gentlemen, yours faithfully,

D. M. PROBYN, General,
Keeper of His Majesty's Privy Purse.

The International Drawing Congress.

The Council, recognising the beneficial results likely to accrue to architecture from the teaching of good practical drawing, have granted the sum of fifty guineas in aid of the funds of the International Drawing Congress to be held in London next August under the patronage of the Prince of Wales. The aim of the British Committee of the Congress is to place upon a better footing the teaching of drawing and other art work in the primary, secondary, and public schools, and to show the extreme importance of producing better craftsmen, especially in such industries as depend upon art for their success. It is part of the plan of organisation that the principal cities and boroughs of the country should hold preliminary meetings and exhibitions at an early date, the intention being to secure effective representation of the educational work of all localities. Such meetings, summoned by the municipal authorities, have already been held successfully at Birmingham, Leicester, and Leeds. Some twenty-five countries will be represented at the Congress. France, in particular, will send a large number of delegates. The German teachers who are to attend will be assisted by a Government grant.

The Shakespeare Memorial.

The Times of the 6th March gave some account of the progress of the movement on behalf of the Shakespeare Memorial, which, it will be recalled, was inaugurated at a great public meeting held at the Mansion House three years ago, and which met with considerable foreign support. The task of giving practical shape to the proposals is in the hands of a committee, with whom have been associated Lord Esher, Sir Edward Poynter, P.R.A. [*H.F.*], Sir Wm. Richmond, R.A. [*H.A.*], Sir Aston Webb, R.A. [*F.*], Mr. Thomas Brock, R.A. [*H.A.*], Mr. John Belcher, A.R.A. [*F.*], and Mr. Sidney Colvin. The memorial is to take the form of an architectural monument, including a statue, and it has been decided to obtain the design by public competition, to be restricted to artists among the English-speaking peoples. The selection of the site for the memorial has been a matter of some difficulty. The south bank of the Thames, suggested on account of Shakespeare's connection with Southwark; the Green Park, facing Piccadilly; Lincoln's Inn Fields—each has been considered in turn, and has had to be rejected for various reasons. Two schemes, emanating from Sir Aston Webb, have been especially prominent; and one of these has led to the decision now arrived at. The first was in connection with the contemplated re-arrangements at Hyde Park Corner; but the idea had to be abandoned. Sir Aston's other proposal was to bring Regent's Park into closer relation with central London by prolonging the Broad Walk virtually across the Marylebone Road into Portland Place, through Park Square, in the centre of which the memorial could be erected. This scheme, which found special favour with the Committee, would have given scope, as *The Times* points out, for a notable London improvement. To carry it out in its entirety, however, would have necessitated special legislation, and the Commissioners of Woods advanced objections which seemed for the moment insuperable. At length a modification of the scheme, suggested by the Commissioners of Woods and the Crown Estate Paving Commissioners after consultation with Sir Aston Webb, has been accepted. The idea of the fine vista up Portland Place has been preserved, and a site allocated for the memorial in a semicircular section of the garden of Park Crescent on its south side, with a diameter of 126 feet facing Portland Place. The scheme involves the removal of the statue of the Duke of Kent, and the King has graciously assented to its transference to an adjoining spot. The question of the site being disposed of, the competition for the design, between architects and sculptors working in collaboration, is to be at once proceeded with. When the winning design has been selected, about a year hence, a world-wide appeal is to be organised for not less than £200,000, half to go to the monument, and the remainder to be administered by an

International Committee for the furtherance of Shakespearean interests. A monument of the kind contemplated for the memorial must necessarily take some years in execution, and it is proposed to make its completion the crowning event of the tercentenary of Shakespeare's death in 1916.

Eighth International Congress of Architects, 1908.

The following letter has been addressed from the Institute to members of the architectural profession throughout the United Kingdom and British Colonies and Dependencies :—

10*th March* 1908.

Dear Sir.—By direction of the Comité Permanent, I have the pleasure to send you the provisional programme of the arrangements for the forthcoming Congress of Architects, which will be held at Vienna from the 18th to 24th May next.

It is hoped that for the honour of the architectural profession in this country the list of British members may be as large as possible. On the occasion of the Congress held in London in 1906, the response made to the British invitation by our foreign colleagues was of a very generous character. The value of these Congresses in advancing the art of architecture, and in effectively dealing with the material interests of architects in all countries, is well established, and the importance of strengthening friendly international relations for these objects cannot be too strongly urged upon the members of the profession.

Arrangements are being made for special terms to be granted to members of the Congress by the railway companies and hotel proprietors, particulars of which will be furnished to members as soon as possible. In the meantime it may be convenient to you to know that the probable cost of the return fare from London to Vienna will be about £8 15*s.* first class, *viâ* Calais and Bâle. The return tickets will be valid for forty-five days, and may be used for alternative return routes, of which further particulars will be issued.

For those wishing to travel together a personally conducted party will be made up which will leave London on Friday, the 15th May, and arrive in Vienna on Sunday, the 17th.

The subscription to the Congress is fixed at 25 kronen (= £1 1*s.*), and for ladies at 15 kronen (= 12*s.* 6*d.*).

The forms of application which have been issued by the Vienna Committee are somewhat complicated, and the financial arrangements suggested by them may easily be misunderstood. The British Section have therefore decided to advise those who propose to accept the invitation to Vienna to acknowledge the invitation in the following manner :—

(*a*) Disregard the yellow form altogether.
(*b*) Fill in name and address on the posteard.
(*c*) Fill in names and addresses on the *White Application Form*, but leave the "Amount of Subscription" blank, and do not send any money or cheque with the Application Form.
(*d*) Send to the Secretary R.I.B.A. names and addresses of those going to the Congress, together with a cheque or postal order payable to him for the amount of the subscriptions.

The British Section will be responsible for forwarding the subscriptions to Vienna and making all further arrangements with the Executive of the Congress.

If, later, you should not find it convenient to be present, the amount of your contribution will be returned to you.—Yours faithfully,

Ian MacAlister, *Secretary.*

Transactions of the 1906 Congress.

The *Compte-rendu* of the last Congress, under the title *Transactions of the VIIth International Congress of Architects, London* 1906, is now ready for issue, and will be in the hands of subscribing members early next week. It consists, with the illustrations, of nearly 600 closely printed pages, and comprises a complete record of the various functions, discussions, and proceedings. The seventy papers contributed on the subjects selected for discussion are printed *in extenso*. These Papers include :—

(I.) "The Execution of Important Government and Municipal Architectural Work by Salaried Officials," by Otto Wagner, Oscar Simon, and Gaston Trélat.

(II.) "Architectural Copyright and Ownership of Drawings," by H. Heathcote Statham, M. Georges Harmand, Gaston Trélat, and D. Pablo Salvat.

(III.) "Steel and Reinforced Concrete Construction," by the Joint Reinforced Concrete Committee, E. P. Goodrich, Professor Cloquet, Gaston Trélat, Henry Adams, A. von Wielemans, Augustin Rey, Peter B. Wight, and Joaquin Bassegoda.

(IV.) "The Education of the Public in Architecture," by John Belcher, A.R.A., T. G. Jackson, R.A., Arthur Hill, Othmar V. Leixner, Banister F. Fletcher, Otto Wagner, F. del Villar y Carmona, Gaston Trélat, Gaston Anciaux, Albert Mayeux, Jean Gilson, and Dr. Muthesius.

(V.) "A Statutory Qualification for Architects," by John S. Archibald, Louis Bonnier, Gaston Trélat, Otto Wagner, Robert Walker, A. North, and Virgil Nágy.

(VI.) "The Architect Craftsman: how far should the Architect receive the Theoretical and Practical Training of a Craftsman?" by Reginald Blomfield, A.R.A., W. R. Lethaby, Fr. van Gobbelschroy, Otto Wagner, Robert Lesage, Gaston Trélat, and J. M. Poupinel.

(VII.) "The Planning and Laying-out of Streets and Open Spaces," by Ch. Buls, Eugène Hénard, Dr. J. Stübben, Polles y Vivó, Gaston Trélat, Raymond Unwin, Augustin Rey.

(VIII.) "To what Extent and in what Sense should the Architect have Control over other Artists or Craftsmen in the Completion of a National or Public Building?" by Sir W. Richmond, R.A., H. P. Nénot, Gaston Trélat, L. B. Müller, Otto Wagner, Dr. P. J. H. Cuypers, José Amargos, M. de Noyette.

(IX.) "The Responsibilities of a Government in the Conservation of National Monuments," by Professor Baldwin Brown, A. Besnard, Gaston Trélat, J. Artigas y Ramoneda, Prof. W. R. Lethaby, the Tuscan College.

(X.) "The Conduct of Architectural Competitions," by J. Guadet, Gaston Trélat, the Société Bouwkunst en Vriendschap.

Supplementary Papers: "Notice on the Château of Saint-Germain," by Honoré Daumet"; "The Tomb of Agamemnon," by Dr. Cecil Smith; "Method for the Reconstruction of Architectural Monuments by Metrophotography," by Marcel le Tourneau.

Non-members of the Congress may obtain copies of the *Transactions* at the Institute, price 10*s.* 6*d.*

The Jury System of Judging Competitions.

16*th March* 1908.

To the Editor JOURNAL R.I.B.A.,—

SIR,—I see by your report of the discussion on Mr. Wills's resolution in favour of the jury system that it was rather taken for granted by several speakers that this system had already been tried in this country and found wanting. A recent important competition was referred to as a case in point.

Might I be allowed to doubt whether the method referred to can rightly be called the jury system—as I am informed it is understood in those countries where it is used—unless it carried with it some system whereby independent votes were awarded by the individual members of the jury on the different points of the designs, these votes added up to eliminate those of least merit, and the process repeated till one design only is left, which design comes to the front automatically by its own merits, without its being necessarily the one which appeals most strongly to the personal tastes of any member of the jury.

As this matter has now to receive the serious attention of the Competitions Committee, it might be of great assistance to their deliberations if the Institute would approach all foreign Architectural Societies and find out how they judge competitions, with special reference to the working of the jury system, where such system prevails.—I am, Sir, faithfully yours, A. R. JEMMETT [*F.*].

The late Mr. D. R. Dale [*F.*].—District Surveyors.

Mr. Daniel Robert Dale, who died on the 29th ult. at the age of seventy-one, had been a Fellow of the Institute since 1882. He served a pupilage of five years with the late John Blore, of Brompton, and was subsequently engaged preparing drawings for fortifications in the office of the Royal Defence Commission. For ten years from 1866 he was in partnership with the late James Tolley [*F.*], and afterwards practised by himself until 1894, when he took into partnership his old pupil, Mr. Franklin Gadsdon. This partnership endured till 1904. Mr. Dale was appointed District Surveyor for West Streatham in 1880, and held the appointment till his retirement last year. He was a very active man in municipal matters, being a member of the Court of Common Council of the City of London, and serving on some of the principal committees of that body.

Mr. ALEXANDER GRAHAM, F.S.A., *Hon. Secretary*, in making the formal announcement of the decease at the Institute last Monday, referred to Mr. Dale's appointment as District Surveyor under the Metropolitan Building Act of 1855, which permitted a practising architect to act also as District Surveyor. Mr. Graham said he thought the occasion would be opportune to mention that last summer a deputation from the Institute waited upon the Building Act Committee of the London County Council on the subject of the appointment of District Surveyors. This deputation urged very strongly a return to the old lines, when architects of experience, architects acquainted with every form of building construction, and with the new materials which were being introduced from day to day, were District Surveyors. They felt it would be better to revert to the old lines rather than continue with the new, under which architects were simply building surveyors or building inspectors, acting under the strict regulations of the London County Council. He was sorry to say that the County Council had not paid much attention to what the deputation had said. He hoped, however, that the day would come when actual facts might be brought to light to show that the practising architect of experience was, in the interests of the public, the best man they could have for a District Surveyor. He mentioned this matter because he believed it was not generally known among members that the Council had taken this step, and had done their utmost to represent to the County Council the views the Institute held upon the subject. Mr. Dale, their late esteemed Fellow, was one of that band of architects who acted as District Surveyors under the old Act. There were very few left of the old practising-architect District Surveyors, and in a few years they must become extinct.

Mr. WM. WOODWARD [*F.*] said he endorsed to the full what Mr. Graham had said with regard to District Surveyors. His (Mr. Woodward's) experience, and the experience of everyone who had been in practice, showed that the right man for a District Surveyor was the man who had followed the profession of an architect, and who helped them in every way, not only in conforming to the Building Act and doing what was necessary in the public interest, but as knowing the whole subject as a result of his own practical experience.

The late George Allen Mansfield [*F.*].

The *Sydney Herald* announces the death, at the age of seventy-three, of Mr. G. A. Mansfield, a Fellow of the Institute since 1873. Mr. Mansfield, who was a native of Sydney, was the son of the late Rev. Ralph Mansfield, a name closely identified with the early history of the colony. He was articled to the late John Frederick Hilly, was for some years associated with him in partnership, and afterwards engaged in practice on his own account. Many of the principal banks and commercial buildings in Sydney were erected from his designs. For several years he was architect to the New South Wales Council of Education, having charge of all existing public school buildings, and the designing and carrying out of all new ones. He was the first President of the New South Wales Institute of Architects on its formation in 1871, and filled the office for many subsequent years. Some of the leading architects of Sydney received their training in his office.

The late Frank Garfield Johnson [*A.*].

Intimation has been received of the death of Mr. F. G. Johnson [*A.*], which occurred at Shanghai on the 9th ult., after a few days' illness. Mr. Wm. H. Atkin Berry [*F.*], who has kindly communicated the sad news, writes:—

"Mr. Johnson left England for Shanghai just two years ago, together with Mr. G. A. Johnson [*A.*] (who, though of the same name, is in no way related to the deceased), these two gentlemen having been selected for appointment as assistants to the firm of Messrs. Scott & Carter, architects, of that city. Mr. Walter Scott [*A.*], head of that firm, writing to me from Shanghai, under date 13th ult., in a letter just received, and referring to Mr. Johnson's death, says:—'I need hardly tell you how much I regret this sad termination to what I am sure would otherwise have been a successful career. Johnson was a thoroughly good fellow, well up in his work, hardworking, conscientious, and popular with all his companions. He was buried on the 11th, and having been a member of the Volunteer Corps his bearers were eight of his comrades, a squad of his company fired three volleys over his grave, and the "Last Post" was sounded at the conclusion of the ceremony.' Mr. Johnson was twenty-seven years of age. He became a Student of the Institute in 1902, passed the Final Examination in 1903, and was elected Associate in 1904. For the three years preceding his departure for Shanghai he served as assistant in the Superintending Architect's Department of the London County Council."

Mr. W. J. Locke [*Hon. A.*].

Among new members present at the meeting last Monday was the late Secretary of the Institute, Mr. W. J. Locke, who was elected Hon. Associate at the meeting of the 2nd inst. The President, remarking Mr. Locke's presence, observed that the duty which ordinarily devolved upon the Secretary he should like to take upon himself on that occasion, for it was a very great pleasure indeed to him to invite their former esteemed Secretary to come to the table for his formal induction among them as Hon. Associate. Mr. Locke had the heartiest of receptions, and was warmly cheered as he shook hands with the President and turned to take his seat among the members.

The Woodcarver at St. Paul's.

We have been informed by Mr. W. J. Gribble that he has made inquiries at the British Museum, and that the letter of "Phillip Wood" [JOURNAL, p. 282] is not to be found there. Mr. Gribble contributed the document to the JOURNAL in good faith, but with inadequate precautions, and we are indebted to Mr. Arthur Bolton and Mr. Ambrose Poynter for calling attention to the doubtful character of the letter.

ARCHITECTS' BENEVOLENT SOCIETY.

Annual Report adopted at the Annual General Meeting, 12th March 1908.

The Council, in submitting their Fifty-eighth Annual Report, have to record that the number of necessitous cases which sought the assistance of the Society was not so great as that of last year. The unfortunate circumstances of the majority of the applicants have been largely due either to the advance of age or ill health. The rules of the Society forbid publicity with regard to individual cases, but it is a sufficiently established fact in architecture, as in other professions, that it is extremely difficult for a man who has arrived at middle life, and whose practice has fallen off, to find employment in a subordinate position. And some of the saddest cases which come before the Council are due to this cause. There are also cases where the professional man has not been in a position to provide for those whom he has left behind—the cases of the widow and the orphan in poor circumstances. Here again the timely help of the Society has been of the greatest value. The circumstances of each case are investigated by the Council and assistance granted in proportion to the needs of the applicant, and applied in a manner most likely to reinstate him or her in an independent position. Out of seventy-one applications received during the year sixty-five were found deserving of assistance, this number comprising thirty-seven architects and architects' assistants, fifteen widows, and thirteen orphans. In addition to these ten pensioners received their usual payments. The total amount thus distributed in relief was £918. 5*s*.

With regard to the financial position of the Society the Council regret that the amount received in subscriptions was only £658. 19*s*. 6*d*., as against £683. 13*s*. received last year. At the end of the year many subscriptions were in arrear, and six members had withdrawn their subscriptions. Although the number of subscribers has increased within recent years, it is still small as compared with the number of practising architects in the United Kingdom, being not more than ten per cent. of the whole. The Society has always largely benefited by the individual effort of its members, and it is felt that with more systematic help in this direction the finances would be gradually established on a firm basis.

The total amount received in donations was £169, as against £344. 9*s*. 2*d*. received last year, including a donation of £45 received from the executors of the late James Toleman. Further sums were also received from Mr. John T. Christopher (£15. 5*s*.), Mr. John Borrowman (£10. 10*s*.), Mr. Alfred Saxon Snell (£10), Mr. Graham C. Awdry (£10), Anonymous (per the President) (£10), Miss Mabel E. Taylor (£5. 5*s*.), Mr. E. W. Allfrey (£5. 5*s*.), Mr. R. F. Vallance (£5. 5*s*.), and various

sums in smaller amounts. In consequence of these donations and the balance carried over from last year the Council were enabled to increase the investments by the purchase of £258. 7*s*. 9*d*. New Zealand Three per Cent. Inscribed Stock at a cost of £220.

It is with great regret that the Council have to record the death of Mr. Arthur Maryon Watson, Mr. T. Barnes Williams, Mr. George Saunders, and Mr. John Smith.

The following gentlemen, being the five senior members, retire by rotation from the Council: Mr. H. L. Florence, Mr. G. B. Bulmer, Mr. F. W. Hunt, Mr. W. L. Spiers, and Mr. Arthur Ashbridge. To fill the vacancies caused by these retirements the Council have the pleasure to nominate Mr. Wm. Dunn, Mr. Henry T. Hare, Mr. Benjamin Ingelow, Mr. Henry Lovegrove, Mr. Rowland Plumbe, and Mr. William Woodward. The Council have also the pleasure to nominate Mr. William Glover and Mr. Edwin T. Hall as Vice-Presidents.

The thanks of the Society are due to the Royal Institute of British Architects for office accommodation and for the use of rooms in which to hold their meetings.

REVIEWS.

CHURCH FURNITURE.

English Church Furniture. By J. Charles Cox, LL.D., F.S.A., and Alfred Harvey, M.B. Price 7*s*. 6*d*. [*Methuen*. 1907.]

An important work on English ecclesiology has appeared under the unattractive and somewhat misleading title of "English Church Furniture." Such a book has been very long wanted. In fact nothing of the kind, to my knowledge, has been published since Parker's *Glossary* appeared and the old Cambridge Camden Society published its excellent little *Handbook to English Ecclesiology*, my copy of which is dated 1847. Handbooks on Gothic architecture have appeared in shoals, but never a one on ecclesiology. Yet, at any rate of the outer world, for one who is interested in the architecture of a church there are ten who take an interest in fonts, screens, pulpits, bench-ends, and the like. The scope of the new book is very comprehensive, as may be seen from the table of contents. It includes the altar and its accessories, the altar-rails, reredos, sedilia, aumbry, piscina, and Easter sepulchre; church plate; screens and rood-lofts; pulpits, hour-glasses, and lecterns; stalls, misericords, bench-ends, poppy-heads, and pews; chests, almeries, alms-boxes, and collecting-boxes; fonts and font-covers; the church lights and church embroidery—in fact, practically everything in an English church except the mural paintings, stained glass, incised slabs, encaustic tiles, and ironwork. The method pursued by the authors is to give an historic account of each item—*e.g.* fonts—and then to provide a complete list of all the important fonts in the country, arranged in counties; in addition a special description is given of the more important examples. The same course is taken with the altar, the screen, the pulpit, and the rest. Such lists, in the nature of things, cannot be made exhaustively complete and accurate; but it will surprise most to find what an extraordinarily large number of examples has been catalogued. To bring such lists together must have meant years of preliminary labour. The book contains thirty-two plates as well as about ninety illustrations in the text, and, being well and clearly printed, is remarkably cheap at the price. One of the authors, Dr. J. C. Cox, has had exceptional opportunities of studying church accessories, first in the compilation of his monumental work in four volumes on the *Churches of Derbyshire*, and more recently in surveys of many districts undertaken for the *Victoria History of the English Counties*, now in course of publication. The book is clearly and brightly written; there is little of dryasdust antiquarianism about it. There is no architect, however extensive his practice and his experience, but will find a wealth of novelty and interest in the book, and frequently a flood of light thrown on what may have seemed unintelligible or unimportant, or which perhaps has been passed over unnoticed. The book being fully indexed, the very numerous churches treated of are easy of reference. FRANCIS BOND [*H.A.*].

SHOP-FRONTS.

English Shop-fronts Old and New: A Series of Examples by Leading Architects. By Horace Dan and E. C. Morgan Willmott. La. 8*vo. Lond.* 1907. *Price* 15*s*. *net*. [*B. T. Batsford, 94 High Holborn.*]

So accustomed have the frequenters of towns and cities become to the monotony of street upon street of commonplace shop-fronts that to come across one with any claims to distinction was till recent years an experience which the observant passer-by was not slow to record. What a remarkable state of affairs it is that a well-designed shop-front should be such a precious relic in our older cities and such a rarity in our modern ones! The fact is that the old ones, which almost certainly had some interest or some characteristic feature, have nearly all been pulled down, altered or "improved" beyond recognition, and the new ones have sprung up in their thousands, regardless of everything but the one consideration of providing the largest possible area of plate-glass. And this necessity, real or imaginary, of making the glass area as great as the ingenuity of man can devise has tended to the glorification of plate-glass, but at the same time it has ruined the architecture of our streets, and will yet continue to do so, more or

less; for when a conviction, however erroneous, has once received general acceptance it takes a long time to remove it. But the appearance of this book is a hopeful sign, and it augurs well for the future that there should be sufficiently wide interest in the subject to call for it at all.

Without the skilled designer the shop-front of to-day is almost certain to be unarchitectural, because contrary to architectural principles and to sound construction. The construction may be sufficiently strong, but it is seldom apparent; and an appearance of weakness prevails where strength and solidity should be most forcibly expressed. And the unfortunate thing is that the skilled designer is so rarely approached and given the opportunity to avail himself of the materials and methods of construction which the present day affords, and to dispose them in forms suggested by a study of the old models which yet survive. But this book shows that now and again the opportunity has occurred, and in many instances has been made the most of. Here in a small compass a series of fifty-two collotyped views have been brought together from old and new examples scattered about London and many other cities. It is very interesting to turn them over and note their points one by one; but in spite of variety of types and display of inventiveness noticeable in the modern ones it is to the old examples that we turn back for the more reticent, more reposeful, and more thoroughly satisfying designs. It may be thought that their number could with advantage have been greatly increased: there are certainly many more hidden away in various parts of the country; but the types illustrated here have been so well chosen that it is very doubtful whether many could be found that differ sufficiently, except in detail, to warrant their inclusion. One misses the old signs which expressed at a glance the nature of the trade carried on within, but their absence opens up the possibility of striking some note in the design of the shop-front itself. Plate xv. is an exceedingly good example of this, and plate xxxvi. is another; but it is rarely attempted, for it is not every trade that suggests a suitable *motif*, and good lettering is the next best thing, seen to advantage on the angle shop (plate xxxi.), and on another shop belonging to the same firm in Kingsway, which does not, however, figure in the book. The letterpress is concise and well interspersed with further illustrations, which are of value in themselves, and help to explain the plates; and in one or two instances working drawings of subjects illustrated are reproduced, as in the case of the well-known recessed front in Cheapside (plate xvii.).

It is likely that the book will draw attention to the consideration of shop-fronts, not only from the æsthetic, but also from the commercial point of view; and more important still that it will materially help to raise the standard of design, and contribute to the improvement which has tentatively manifested itself in recent years. The authors are quite justified in their opening statement in the preface to the effect that "no apology is needed for the publication of a volume upon shop-fronts, a subject full of architectural interest," and our thanks are due to them and to the publisher for the delightful one that they have produced.

ARTHUR STRATTON [*A.*].

COMPETITIONS.

Tiverton Schools.

Mr. E. S. Perkin, writing on behalf of the promoters of this competition under date 18th March, says:—

"In accordance with representations made by several competitors, architects who desire additional information to that already supplied in the Conditions issued are requested to send their questions not later than Tuesday next, 24th March. Supplementary information will then be sent to competitors by 31st March, instead of the 18th April, as stated previously, thus giving them the benefit of the intervening time. Several important questions have been asked, the answers to which architects should know before commencing work."

MINUTES. X.

At the Tenth General Meeting (Ordinary) of the Session 1907–08, held Monday, 16th March 1908, at 8 p.m.—Present: Mr. Thomas E. Collcutt, *President*, in the Chair; 27 Fellows (including ten members of the Council), 28 Associates, 1 Hon. Associate, and visitors—the Minutes of the General Meetings (Special and Business) held Monday, 2nd March 1908 [p. 308], were taken as read and signed as correct.

The Hon. Secretary announced the decease of George Allen Mansfield (Sydney, N.S.W.), *Fellow*, elected 1873; Daniel Robert Dale, *Fellow*, elected 1882; Frank Garfield Johnson, *Associate*, elected 1904.

The following members attending for the first time since their election were formally admitted by the Chairman viz. William John Locke [formerly *Secretary R.I.B.A.*], *Hon. Associate*; Gilbert Mackenzie Trench, Reginald Guy Kirkby, Joseph Henry Taylor, Roland Welch, and Walter Adolphus Ritchie-Fallon, *Associates*.

A Paper on BANGOUR VILLAGE ASYLUM, EDINBURGH, having been read by Mr. Hippolyte J. Blanc, R.S.A. [*F.*], and illustrated by lantern slides, a discussion ensued, and a vote of thanks was passed to Mr. Blanc by acclamation.

The proceedings closed, and the Meeting separated at 10.20 p.m.

THE following student having satisfactorily completed the the three years' course in architecture at University College, London, has been exempted by the Board of Examiners from sitting for the Intermediate Examination, and has been registered *Student R.I.B.A.*:—FRANCIS ASHBURNER RICHARDS [*Probationer* 1906], of 19 Wetherby Gardens, S.W. This exemption was granted in January last year.